

Claims

- [c1] A teat cup assembly comprising a shell and a flexible inflation mounted therein wherein the shell has a plurality of interior longitudinal channels, each with at least one retaining flange that defines an edge of a slot in the channel that faces the interior of the shell, and the inflation has an external rib in each of the channels and that is retained for radial articulation within the channels during inflation and deflation of the inflation, and wherein the interior longitudinal channels and the external ribs are shaped to provide radial articulation of the external ribs during inflation and deflation of the inflations.
- [c2] A teat cup assembly according to claim 1 wherein the external ribs of the inflation have a neck that is received in the slot of the shell channel and at least one laterally extending flange that seats radially behind the shell retaining flange.
- [c3] A teat cup assembly according to claim 2 wherein the ribs extend longitudinally within the channel.
- [c4] A teat cup assembly according to claim 3 wherein the ribs are generally complementary in shape to the longitudinal channels while still providing for radial articulation of the ribs within the channels.
- [c5] A teat cup assembly according to claim 4 wherein each of the channels is T-shaped in transverse cross-section.
- [c6] A teat cup assembly according to claim 5 wherein the longitudinal ribs are also T-shaped in transverse cross section.
- [c7] A teat cup assembly according to claim 6 wherein the T-shaped ribs fit loosely within the T-shaped channels for radial articulation of the T-shaped ribs with respect to the T-shaped channels during an inflation and deflation cycle.
- [c8] A teat cup assembly according to claim 7 wherein there are three interior T-shaped longitudinal channels.
- [c9] A teat cup assembly according to claim 1 wherein the ribs extend longitudinally within the

channel.

- [c10] A teat cup assembly according to claim 1 wherein each of the channels is T-shaped in transverse cross-section.
- [c11] A teat cup assembly according to claim 10 wherein the longitudinal ribs are T-shaped in transverse cross section.
- [c12] A teat cup assembly according to claim 11 wherein the T-shaped ribs fit loosely within the T-shaped channels for radial articulation of the T-shaped ribs with respect to the T-shaped channels during an inflation and deflation cycle.
- [c13] A teat cup assembly according to claim 12 wherein there are three interior T-shaped longitudinal channels.
- [c14] A teat cup assembly according to claim 1 wherein the longitudinal ribs are T-shaped in transverse cross section.
- [c15] A teat cup assembly according to claim 1 wherein there are three interior T-shaped longitudinal channels.